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Astralis: Discover 1000 Years of You

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Discover 1000 Years of You

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Arts in Visual Communication Design

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Abstract

Problem

We are defined by our memories and experiences. Despite the proliferation of family photos and video media, we lack an engaging way to connect our memories and experiences to those images. Online genealogical programs (such as Ancestry, MyHeritage, or FamilySearch) remain two-dimensional and inherently confusing to navigate. As soon as the user chooses to dive more deeply into one relative's additional family, they leave the view they were in and cannot easily navigate back, or even see themselves in context any longer. Similarly, image archiving programs (such as Apple Photos, Shutterfly) or AmazonPhotos) are simplistic and rely on a strictly linear organization, or visual categorization, and are also 2-dimensional.

Solution

The evolution of *Astralis* began with the idea of combining an imageable and navigable genealogical interface with an image and document storage and access function that would let anyone immediately and intuitively explore both their extended family as well as those people's memories. Create a genealogical interface that allows you to browse in VR, using three-dimensional rather than two-dimensional systems to interact with the hierarchies of both genealogical and image information. The result is an immersive, interactive experience that allows a personal, intimate connection to memories and significant moments, in a searchable, archival format.

Keywords

3D user interfaces

Archive

Genealogy

Memories

Virtual Reality

Introduction

From its beginnings as an investigation of strategies to combat the often-toxic interactions between individuals that have developed alongside the rise in social media, which then led to an exploration of "safe" methods for sharing personal memories with others, *Astralis* evolved into a visually rich alternative to the many genealogical and image-sharing / archiving options that exist today. In its final form, *Astralis* combines the functions of both genealogical records and archiving all forms of memories into a unique, 3-dimensional, searchable, visually intuitive and user-friendly VR interface.

Why *Astralis* was Developed

This system developed first as a reaction to the frustrations of trying to search and understand connections through any of the currently popular and available genealogical platforms. They are inherently confusing for one key reason: none of them allows seeing the entire family structure simultaneously, because they are all represented 2-dimensionally, which makes seeing descendants difficult when you are trying to trace someone's pedigree. As the work progressed, it became clear that a better method of organizing images, whether photos, videos or documents, needed to be integrated into the system as well, because the existing systems for archiving images are equally awkward to navigate, owing again to their limitation to two dimensions. The idea of combining genealogy with the records that bring it to life took shape as a 3-dimensional model, explorable through VR.

How *Astralis* Works

By visualizing the family tree in a circular format, each person could be represented as a planet, and be made the center of their own solar system. The structure of the family tree resolved into concentric circles, where each ring represents a generation, allowing the user to easily compare their family history from one side of their tree to the other (namely father's information & mother's information – if in a binary relationship). When in this view, the entirety that person's relationships are then immediately visible. The solar system model allows you to keep yourself in context at all times, reducing the complexity of a family tree to a simple and imageable form. With this model existing in a VR space, the user can move around at will and explore any relationship, or even

change viewpoint to see a relationship more clearly.

Why *Astralis*?

A predominant number of existing platforms that help store photos and video memorabilia have never really challenged the typical way of seeing images. Most simply display images in a grid, naming each section based on when the images were captured. Only some provide a timeline to give a visual context for when each moment happened in relation to one another. In the secondary state of *Astralis* the entirety of someone's life's worth of media is mapped onto the interior surface of their planet. By navigating the x & y axis (x being months/days, depending on how zoomed in; and y being years) this allows the user to relate one moment in time to another seamlessly. For example, a user can see all of their birthday photos and videos in order vertically.

Lastly the third state of *Astralis* has a video playback option. The controls have a timeline displayed to the left of all the images being shown to the user and an option for one of their relatives to dictate one of their fondest memories. By having an audio recording from a family member you will always have a way to listen to your family sharing their fondest memories. The images can either be used literally to explain what is happening in the story, or more contextually, in instances where someone didn't capture an image of the event happening, but there is an image that keys the event to the time of the story to help paint a picture.

What is the inherent value of learning about your ancestors, or even details about your immediate family that you were unaware of? According to an article by Kelly Wallace from CNN "A study conducted at Emory University and published in 2010 ... found that the more children knew about their family history, the higher their self-esteem and the better able they were to deal with the effects of stress. Family stories provide a sense of identity through time, and help children understand who they are in the world". (Wallace, 2015).

The challenges involved in archiving old family memorabilia still prevail, especially over the last 30 years as the means of capturing still and moving images have changed so rapidly. Moving from several shoeboxes worth of negatives and prints, to the thousands upon thousands of digital photos and videos we capture constantly, we find ourselves in an overwhelming media overload. You may take a picture with your iPhone and then store that in the cloud, but how often does anyone go back and make the time to sort through these hundreds of images and then find even more time to edit them and create an album or book. As media proliferates, we are in ever greater need of a new way to store and revisit our fondest memories. In traditional

printed albums we often then lose access to some of our favorite stories, or even names of people in images. With metadata in digital files we can at least access when and sometimes where an image was created. And many of these platforms even have software that enables us to identify who is in an image, but we still lose the cherished memories associated with these images.

This platform could be even more useful moving into the future. No matter the technology used to capture and store stills, video and speech in the future, the basic structure of Astralis would be just as useful hundreds of years from now. It could continue to accomplish the dual goals of passing our memories down to generations to come, and not being forgotten ourselves.

Conclusion

Through my design process, I have addressed the challenge of reducing an extremely complex system of relationships into a form that can be comprehended intuitively, offer a fun and engaging experience, but also thorough and easy to navigate. By analogizing people to planets I created a system that lets you visualize your entire family tree in a way that is both graphically simple and legible but still infinitely detailed and customizable.

The greatest challenge in resolving the structure was how to show the family state simultaneously with the legacy view. By tapping on the ring of each generation the user can see the other children from that generation, manifested in a secondary tier that drops down below the selected ring.

The ability of the user to enter directly into any of their relatives' planets and experience their memories, personalities, triumphs and tragedies, allows a uniquely personal connection.

If I were to develop *Astralis* further I would like to explore other ways to potentially organize and sort memories within the sphere and develop additional ways to search or apply tags to each memory, as well as to explore the mechanics of adding new images, videos, documents and narratives.

Bibliography

(2019, September 10). Introducing the Polaroid Lab [Video file]. From https://www.youtube.com/watch?v=EUVq7adbDsQ

Binder, M. (2020, May 28). YouTube rolls out Video Chapters so you can find exactly what you want in a video. From https://mashable.com/article/youtube-video-chapters/

Esther. (2017, August 16). New Innovation: Sun Charts. From https://blog.myheritage.com/2016/06/new-innovation-sun-charts/

Hyman, I. (2013, December 30). Photographs and Memories. From https://www.psychologytoday.com/us/blog/mental-mishaps/201312/photographs-and-memories

Logrippo, R. (1994, June 19). Kids' self-esteem can be enhanced by photographs. Retrieved 2020, from https://www.baltimoresun.com/news/bs-xpm-1994-06-19-1994170178-story.html

Mayo, M. (2019, April 02). How to Create Beautiful Family Tree Charts on MyHeritage and Ancestry. From https://familyhistorydaily.com/genealogy-help-and-how-to/family-tree-charts/

Resnick, B. (2018, March 28). What smartphone photography is doing to our memories. From https://www.vox.com/science-and-health/2018/3/28/17054848/smartphones-photos-memory-research-psychology-attention

St-Esprit, M. (2018, December 12). How Millennial Parents Are Reinventing the Cherished Family Photo Album. From https://www.theatlantic.com/family/archive/2018/12/preserving-kids-photos-in-the-digital-age/577579/

Ted Talk. (2013, September 23). Https://www.youtube.com/watch?v=PB2OegI6wvI [Video file]. From https://www.youtube.com/watch?v=PB2OegI6wvI

Wallace, K. (2015, June 03). How children benefit from learning their family history. From https://www.cnn.com/2015/06/03/living/telling-kids-family-history-benefits-feat/index.html